Kepler - Bug #6829

ant change-to fails under Windows Server 2012 R2 with Cygwin

08/12/2015 04:39 PM - Christopher Brooks

Status:	Closed		**Start date:**	08/12/2015
Priority:	Low		**Due date:**	
Assignee:	Christopher Brooks		**% Done:**	0%
Category:	build system		**Estimated time:**	0.00 hour
Target version:	2.5.0		**Spent time:**	0.10 hour
Bugzilla-Id:				

Description

Under Windows Server 2012 R2 with Cygwin, I ran

```
mkdir kepler.modules
cd kepler.modules
svn co https://code.kepler-project.org/code/kepler/trunk/modules/build-area
cd build-area
```

and then ant change-to failed:

```
$ ant change-to -Dsuite=kepler
Buildfile: C:\Users\cxh\src\kepler.modules\build-area\build.xml

change-to:
[change-to] Copying 1 file to C:\Users\cxh\src\kepler.modules\build-area
[change-to] Retrieving modules....
[change-to]
[change-to] kepler:
[change-to] Downloading (if necessary) kepler...
[change-to] svn co -r head https://code.kepler-project.org/code/kepler/trunk/modules/kepler C:\Use
rs\cxh\src\kep\
ler.modules\kepler
[change-to] svn: E000002: Can't make directory '/cygdrive/c/Users/cxh/src/kepler.modules/build-are
a/C:\Users\cxh\
\src\kepler.modules\kepler': No such file or directory
[change-to]

BUILD FAILED
C:\Users\cxh\src\kepler.modules\build-area\build.xml:104: ERROR: It appears that the command did n
ot execute pro\
perly and exited with an exit code of: 1

Total time: 1 second

cxh@AMPERE ~/src/kepler.modules/build-area
$
```

I can give out accounts on ampere.eecs.berkele.edu if necessary.

History

#1 - 08/12/2015 05:56 PM - Daniel Crawl

- Target version set to 2.5.0

I can reproduce on Windows 7 and will fix this.

#2 - 08/14/2015 11:12 AM - Daniel Crawl

- Priority changed from Normal to Low

This looks like a problem with Cygwin, not Kepler since Kepler is using the correct path.

Apparently, this command has not worked on Cygwin for any of the Kepler 2.x releases, so I'm inclined to lower the priority.

#3 - 08/14/2015 01:01 PM - Christopher Brooks

I don't agree that this is a low priority bug because it means it could mean that it is not possible to build Kepler under Windows. This used to work under Cygwin, I was able to run it for previous Kepler 2.x releases. I'm not sure what changed.

Building under Eclipse requires running svn and ant, it could be possible to do this from the DOS cmd shell, someone should check.

If we can't build Kepler under Windows then we will not be able to create Windows installers.

#4 - 08/14/2015 01:15 PM - Daniel Crawl

You can definitely build Kepler on Windows in the cmd shell. Ant and svn need to be in your $PATH.

This problem is due to Cygwin not correctly handling paths. I just tried ant change-to under Cygwin for Kepler 2.0, 2.3, and 2.4, and they all failed...

You can build the Windows installer on Linux (and probably Mac). I did this for Kepler 2.4.

#5 - 08/14/2015 01:28 PM - Christopher Brooks

Ok, good that we can build the development tree under cmd.

Not being able to build under Cygwin is a bit embarrassing and sends a message that Kepler is not serious about being developed under Windows.

Personally, I'm tempted to drop support for Windows because it is very difficult to use Windows to develop outside of the Microsoft tool set. Eclipse does ok, but the svn integration is problematic.

The Kepler community seems to be mostly Mac or Linux these days. The fact that no one has complained about this issue indicates that there are very few, if any, Kepler developers under Windows.

That said, there is a large community of Windows users out there...

#6 - 08/14/2015 04:19 PM - Daniel Crawl

I suspect there is plenty of development under Windows that does not use Cygwin. :)

In any case, I'm willing to update Kepler to get this working, but it's not clear how since the paths returned by Java File objects under Cygwin are of the form "C:\...". Does every File path have to be run through the cygpath program? It would be impractical to do this for every File object used in Kepler.

#7 - 08/14/2015 05:33 PM - Christopher Brooks

To handle \, I had pretty good results with doing a simple substitution.

You could also create URLs and go back and forth between File and URLs, converting to URIs as needed.

It used to be possible run ant change-to under Cygwin, so it could be that not that many changes are necessary.

A big issue in Cygwin is that the 'pwd' command could return something that starts with "/cygdrive". However, commands like Java don't typically understand that syntax. A common mistake under Ptolemy and Windows is to do

export PTII=`pwd`

Under Cygwin, this will give you something like /cygdrive/c/Users/cxh/src/ptII, which will not work with Java. $PTII/configure and ptolemy.util.StringUtilities both check for this.

#8 - 08/16/2015 03:53 PM - Daniel Crawl

This issue is dependent on which svn is used. If a non-Cygwin svn is used, the paths do not have to be rewritten.

#9 - 08/16/2015 04:26 PM - Daniel Crawl

- Assignee changed from Daniel Crawl to Christopher Brooks

I implemented a fix. Reassigning to Christopher to verify.

#10 - 08/16/2015 05:22 PM - Christopher Brooks

- Status changed from New to Closed

Yay!

I was able to build and run under Windows using Cygwin's svn 1.8.11.

Closing this one.